3: Anonymous U-4 (no date) 1920 RH1 Caucasia RH1

nexion is made with all parts of Russia) to Baku, *via* Tikhoretskaya, Kavkazkaya, Armavir, Mineralniyavodi, Beslan, Grozni, Petrovsk, and Derbent. From Tikhoretskaya to Mineralniyavodi the track is double.

There are four principal branches: one runs from Tikhoretskaya to Tsaritsin on the Volga, 333 miles; another from Tikhoretskaya to Ekaterinodar, and thence as a double line to Novorossiisk, 170 miles in all; a third from Kavkazkaya to Ekaterinodar, 85 miles; and a fourth from Kavkazkaya to Stavropol, 93 miles. There are also short branches from Mineralniyavodi to Kislovodsk and other watering-places, from Kotlyarevskaya to Nalchik, and from Beslan to Vladikavkaz.

The Vladikavkaz Railway is considered to be one of the most profitable and best-managed private lines in Russia. The company's original concession expired in 1911, but was renewed for fifteen years, and thereupon various improvements and plans for new branches and terminal facilities were undertaken.

The receipts in 1912 amounted to £5,845,100, and the expenses to £3,137,400, leaving a net profit of £2,707,700, less the sum of £348,400, which the State received in accordance with the rate fixed in the company's statutes. In 1910, the latest year for which such figures are available, the railway carried about 8,000,000 tons of goods.

(ii) The *Transcaucasian Railway* runs from Batum to Baku, a distance of 563 miles, *via* Samtredi, Rion, Sharopan, Michailovo, Tiflis, and Elisavetopol. From Akstafa to Elisavetopol and from Adji-Kabul to Baku the track is double. The railway also owns an 8-in. pipe line from Baku to Batum, which is capable of delivering 1,600,000 tons of oil per annum.

There are six principal branches: from Samtredi to Poti (41 miles); from Rion, *via* Kutais, to Tkvibuli (33 miles), serving the coal-mines at the latter place; from Sharopan to Sachkeri (narrow gauge, 33 miles), serving the Chiaturi manganese mines; from Michailovo, *via* Borzhom, to Bakuriani; from Tiflis, *via* Alexandropol and Kars, to Sarykamish (226 miles), with

496a branch from Alexandropol to Julfa on the Persian
475 border (206 miles), and thence to Tabriz; and from Baku to Sabunchi (double track, 12 miles), with a single-track branch (3 miles) to the Surachani oil-field.

The receipts of the Transcaucasian Railway in 1911, the latest year for which figures are available, were £1,983,455, and the expenses £1,293,485. In 1910 the railway carried 6,000,000 tons of goods. The working of the railway was said to give cause for dissatisfaction in many respects. High freights, deficient rolling-stock, and undue delays were complained of by traders; but though the management made promises of amendment, these had not been fulfilled when war broke out.

473 (iii) An independent company, the *Armavir–Tuapse*
496 *Railway Company*, was the owner of the line, 166 miles long, which runs from Armavir through the Maikop oil-fields to the port of Tuapse. This line was provisionally opened for traffic in 1914 and completed in 1916. No figures as to its working are yet available. Proposed extensions are referred to below.

499 *Railways under construction.*—Eight short lines in the north-western districts of Ciscaucasia were surveyed or under construction in 1914. Their object was to serve agricultural interests in this area. A line along the valley of the Terek to serve Mozdok and shorten the main line to Baku was also being built.

In Transcaucasia the principal lines under construction were extensions into Turkish Armenia, at the time of the invasion of that province by the Russians in 1915–16. A line from Tiflis to Telav, 116 miles long, under construction by an independent company, financed by Georgian landowners, was almost finished in 1914. It was intended to tap a wine-growing district.

Projected Railways.—Extensive additions to the Caucasian railway systems had been planned and in some cases surveyed, and money had been raised for their construction when war broke out.

The most important was the Black Sea coast line

504 [413] the shore front there are 7 piers with depths varying from 19 to 29 ft. at their outer ends. Five of these piers are owned by the Vladikavkaz Railway Company, one by the Russian Steam Navigation and Trading Company, and one by the Russian Standard Oil Company, and all are connected by double lines of rail with the terminus railway station. There is also on the south-west of the harbour a mole, used by coasters, with a depth of 23 ft. alongside. Altogether, there are berths for about 22 steamers.

In autumn and winter anchorage at the head of the bay is rendered very unsafe by the *bora*, a violent north-easterly wind which then prevails; vessels are sometimes unable even to enter.

The harbour is lit by electric light and there are ample loading facilities. The Vladikavkaz Railway storehouses can take 70,000 tons of grain. An iron foundry close to the harbour makes marine boilers and executes repairs.

[439] Novorossiisk has a considerable export trade in grain and mineral oil, amounting to about £5,000,000 a year in value. The imports are inconsiderable, and consist chiefly of machinery, hardware, and coal.

Poti harbour affords safe protection to shipping, but is practically unapproachable in bad weather. An outer and inner basin are formed by two moles built of concrete blocks. Another mole in the middle of the outer basin carries two lines of rails and several large sheds. In the inner basin there are berths for eight or ten steamers and an elevator for loading manganese. The length of quayage is 1,500 yds.

[439] In 1913 the value of the exports, of which manganese was by far the most important, was £835,972, whilst the value of the imports for the same year was only £7,350.

Sochi is used by sailing vessels, which anchor off Sochi town in 16 fathoms. Steam vessels are able to anchor closer inshore. Sochi was included in the Government scheme for the construction of ports of refuge on this coast.